DOCUMENT RESUME

ED 247 314 TM 840 526

AUTHOR Gross, Susan; Frechtling, Joy A.
TITLE Screening and Rescreening for the Gifted and Talented Program: 1980-81 and 1981-82 School Years.
INSTITUTION Montgomery County Public Schools, Rockville, Md. Dept. of Educational Accountability.
PUB DATE Jun 83
NOTE 103p.
PUB TYPE Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC05 Plus Postage.
DESCRIPTORS Elementary Education; *Evaluation Methods; *Gifted; *Racial Differences; Racial Discrimination; *School Districts; *Screening Tests; Student Evaluation; Student Placement; *Talent Identification; Testing Programs
IDENTIFIERS *Montgomery County Public Schools Md

ABSTRACT

The purpose of the present study was to reexamine the screening process being used to select students for gifted and talented programs in the Montgomery County Public Schools, Maryland, and to determine whether problems in screening have been overcome. Specifically, the study was designed to: (1) determine whether the revised screening procedures were being implemented in an appropriate and uniform fashion; (2) assess the extent to which more Black and Hispanic students were included in the screening and being selected for programs in an equitable fashion; and (3) reexamine findings from a 1979-80 study regarding the use of various instruments and procedures. The findings indicate that while some changes consistent with the revised guidelines have taken place in the screening and selection process, serious problems continue to exist; and procedures intended to increase minority participation are having only a slight impact. Further, implementation of the screening process continues to be inconsistent across schools. Comments by the staff of the Gifted and Talented Program, which took issue with some of the findings in this report, are also included. (Author/BW)

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MONTGOMERY COUNTY PUBLIC SCHOOLS
ROCKVILLE, MARYLAND

Screening and Rescreening for the Gifted and Talented Program 1980-81 and 1981-82 School Years

JUNE 1983

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Superintendent of Schools

Prepared by the Department of Educational Accountability

MONTGOMERY COUNTY PUBLIC SCHOOLS
Rockville, Maryland

SCREENING AND RESCREENING FOR THE GIFTED AND TALENTED PROGRAM 1980-81 AND 1981-82 SCHOOL YEARS

By

Dr. Susan Gross
Dr. Joy A. Frechtling

Steven M. Frankel, Director
Department of Educational Accountability

Joy A. Frechtling, Director
Division of Instructional
Evaluation and Testing

EXECUTIVE SUMMARY

SCREENING AND RESCREENING FOR THE GIFTED AND TALENTED PROGRAM 1980-81 AND 1981-82 SCHOOL YEARS

BACKGROUND

The purpose of the present study was to reexamine the screening process being used to select students for gifted and talented programs and to determine whether problems in screening, noted in an earlier study[1] have been overcome. Specifically, the study was designed to:

- Determine whether the revised screening procedures were being implemented in an appropriate and uniform fashion
- Assess the extent to which more black and Hispanic students were included in the screening and being selected for programs in an equitable fashion[2]
- Reexamine findings from the 1979-80 study regarding the use of various instruments and procedures

The study looked both at schools conducting screening for the first time in 1980-81 ("initial screening") and at schools which had conducted initial screening activities in prior years and additional screening activities in 1981-82 ("rescreening"). "Initial screening" refers to the first time that a school formally implements the MCPS procedures for screening and selecting students.[3] As of November, 1982, all elementary schools will have conducted initial screening. Once initial screening has been conducted, rescreening of students may take place in later years. Rescreening activities include the reassessment of students who had previously been screened and the screening of students new to the school, whose classmates participated in earlier screening activities. Nine schools were examined in the initial screening study; thirteen schools were examined in the rescreening study.

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1. S. Gross and J. Frechtling, Screening for the Gifted and Talented Program: An Examination of the Process and Procedures, Department of Educational Accountability, Montgomery County (Md.) Public Schools, March, 1981.

2. Equitable means a proportion equal to that in the school population.

3. Initial screening consists of two phases: global screening, the first and most general phase; and specific screening, the second and more detailed phase, designed to gather more information on students who have shown any indication of giftedness in global screening. Students are then selected for programs based on both their performance in specific screening and professional judgment.

SUMMARY OF FINDINGS

The findings indicate that while some changes consistent with the revised guidelines have taken place in the screening and selection process, serious problems continue to exist; and procedures intended to increase minority participation are having only a slight impact. Further, implementation of the screening process continues to be inconsistent across schools.

Preliminary examination of the procedures used for rescreening of students suggests that this is an especially problematic area and that important differences exist in how rescreening is conducted in different schools. Taken as a whole, the data suggest that serious inequities still exist in the selection of students for gifted and talented programs. Specific findings follow.

INITIAL SCREENING: 1980-81

The Population Screened and Selected

- A large increase in the percentage of students screened and selected for gifted and talented programs was found in 1980-81 compared to 1979-80 (Exhibit 1). For example, 22 percent of the eligible population in the schools examined were selected for programs in 1980-81;[4] the comparable figure for the 1979-80 sample was 8 percent.[5]

- Exhibit 1 also shows that inequities in the participation rates of the different racial groups continue to exist. While more students in all racial groups were included in the global and specific screening pools in 1980-81 than were in the past, the proportions selected for programs increased less for blacks and Hispanics (8 and 9 percent increase, respectively) than for Asians and whites (21 and 15 percent increase, respectively).

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4. Examination of the schools included in the 1979-80 sample shows no consistent attribute such as student achievement, school location, size, etc. that would account for these changes. Thus they appear to result from changes in the screening and selection practices used in the schools.

5. It must be noted that the 1979-80 figures are based on 15,368 students in 40 schools, while the 1980-81 figures are based on 3,019 students in 9 schools. However, the racial breakdowns of the two samples are practically identical, and both groups are very similar to MCPS' overall population breakdowns. Therefore, it is felt that the comparison presented here is justified.

EXHIBIT E-1

A Comparison of Students Screened and Selected: 1980-81 and 1979-80

Race and Year	Sample Population		Students Included in Global Screening		Students Included in Specific Screening		Students Selected for Programs	
	Number	%	Number	%(a)	Number	%(a)	Number	%(a)
Asian								
1980-81	211	7	159	75	145	69	58	28
1979-80	889	6	249	28	161	18	82	9
Black								
1980-81	362	12	271	75	183	50	39	11
1979-80	2,004	13	467	23	131	7	62	3
Hispanic								
1980-81	121	4	124(b)	100	96	79	14	12
1979-80	606	4	120	20	61	10	19	3
White								
1980-81	2,324	77	1,593	69	1,390	60	548	24
1979-80	11,836	77	2,974	25	1,959	17	1,081	9
Total								
1980-81	3,019		2,153*	71	1,818***	60	659	22
1979-80	15,368		3,852**	25	2,326****	15	1,257*****	8

* Includes 5 students for whom race is unknown.
** Includes 31 students for whom race is unknown.
*** Includes 3 students for whom race is unknown.
**** Includes 7 students for whom race is unknown.
***** Includes 9 students for whom race is unknown.

(a) Figures are percentages of population by race globally screened, specifically screened, and selected for programs.

(b) More Hispanic students screened than contained in data base school enrollments, probably due to high mobility rate in some schools.

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The Screening Process

- Schools varied widely in the proportion of students screened. Proportions of students included in the global screening pool ranged from 14 to 100 percent over the nine schools in the sample; participation rates in specific screening ranged from 9 to 91 percent of the school population.[6]

- The data confirm the previous study's findings regarding the performance of minority students on the screening instruments and the importance placed on standardized achievement tests in screening and selection. Asian and white students attained the global criteria most often on the standardized tests, while blacks and Hispanics generally performed poorly on these measures. Additionally, despite the guidelines which emphasize that test scores must be viewed cautiously, few students were selected for programs who failed to attain the global criterion on the standardized tests.

- Greater emphasis on professional decision making occurred in the 1980-81 screening effort. The data show, however, that professional decision making assisted Asian students the most and Hispanic students the least. Of those selected for programs without meeting the specific criteria, 53 percent were Asians, 43 percent were whites, 42 percent were blacks, and 29 percent were Hispanics.

- The findings indicate that several changes have taken place in the use of instruments for screening and selection consistent with the revised guidelines but that standardized achievement tests continue to receive the major emphasis in many schools. Exhibit 2 shows the tests used for global and specific screening. The only instruments used for screening purposes across the board in all nine schools in the 1980-81 sample were the standardized achievement tests and the Raven Matrices.

RESCREENING

Most of the problems identified in initial screening were also found in rescreening. Further, even more severe problems in the consistency of implementation of the procedures were observed.

Population Screened and Selected

- Analysis of data by race showed that black students continued to be underrepresented, while improvement was shown for Hispanics. In the sample schools, 4 percent of the black students were selected for program participation following subsequent screening. The population

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6. In two out of the nine schools, practically all students were globally and specifically screened. Their screening practices affected the uniformity of the procedures and served to inflate the overall percentages of students globally and specifically screened.

EXHIBIT E-2

Instruments Used in Gifted and Talented Global and Specific Screening

Instruments	Recommended Grades to be Used	Used In Global Screening	Used In Specific Screening	Description of Information/Subtest Used
Nomination Instruments				
Staff nomination (miscellaneous checklists including Renzulli-Smith and Renzulli-Hartman)	K-6	X	X	Teachers respond to a checklist of characteristics such as verbal ability, creativity, reasoning ability and leadership.
Self-nomination	3-6	X		Students complete a form which includes writing a paragraph indicating the reasons they wish to be considered for gifted and talented program.
Parent Nomination	K-6	X		Consent form, indicating their wish to have students included included in the screening.
Peer Nomination (classroom survey activity conducted by teacher)	3-6	X		Students nominate peers who seem to know about a lot of different things, who would be best at figuring out what to do in a strange place, or who have the most original or creative ideas.
Raven Progressive Matrices				
	K-6	X	X	Nonverbal test based on imbedded figures.
Standardized Group Achievement Tests				
Stanford Early School Achievement Test (SESAT)	K-1	X	X	Levels I and II: Environment, Math, and Aural Comprehension
Stanford Achievement Test	2-3	X	X	Primary I - Grade 2: Language, Vocabulary, Reading Comprehension, Math Concepts, Math Application. Primary II-Grade 3: Vocabulary, Reading Comprehension, Math Concepts, Math Application.
Iowa Tests of Basic Skills (ITBS)	4-6	X	X	Vocabulary, Reading Comprehension, Math Concepts, Math Application
California Achievement Test	3-6	X	X	Reading Vocabulary, Reading Comprehension, Math Comprehension, Math Concepts and Application, Total
Cognitive Abilities Test (CAT)	4-6	X	X	Verbal, Quantitative, Nonverbal
Short Form Test of Academic Aptitude (SFTAA)	2-3		X	Language: Vocabulary, Memory. Nonlanguage; Sequences, Analogies. Total
Other individual or Small Group-Administered Tests				
CIRCUS	K-1		X	How Much and How Many (Quantitative) and Think it Through (Reasoning)

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in these schools was 11 percent black. In contrast, the school population contained 4 percent Hispanic students and 4 percent of those selected were Hispanic.

- Analysis of rescreening activities by grade level showed a range within the 13 schools of 1 to 6 grades being included.

Rescreening Process

- Implementation of procedures was not uniform across the 13 schools. Differences not in accordance with guidelines were found in the instruments and subtests of instruments used and the criteria for selection employed. For example, eight schools required that students meet three or more specific criteria for selection, three schools required that students meet two criteria, one school required that students meet five criteria, and one school used only results on the California Achievement Tests in Grades 4 and 5.

CONCLUSIONS AND RECOMMENDATIONS

Two major findings emerge from the analyses:

- Implementation of the screening processes continues to be inconsistent across schools and diverges from the countywide guidelines. The lack of consistency is even more severe where rescreening is involved.

- Despite efforts of school staffs to include minority students in the screening pools, these students, particularly blacks and Hispanics, are not being selected for program participation in representative numbers.

These findings lead staff to raise some very fundamental questions about screening and the approach that Montgomery County has, to date, adopted. While it is clear that there are some very understandable reasons for trying to implement a uniform procedure which relies in large part on standardized achievement test instruments, the procedure as it now stands must be questioned from three perspectives.

- There is no evidence that the present criterion used for performance on the standardized tests discriminates between students who can succeed in gifted and talented programs and students who cannot.

- Given what is known about the performance of minority students on most standardized achievement tests, it is likely that black and Hispanic students will continue to be underrepresented in gifted and talented programs as long as selection continues to be based in large part on these instruments.

- Uniformity of implementation is very difficult to achieve, and the tendency of schools to modify the screening procedures has been documented repeatedly. While some of the modifications clearly appear to be less than desirable, the possibility that greater local flexibility might well serve a positive purpose cannot be dismissed.

Therefore, it is time to take a very serious look at the current screening process and to reexamine some critical issues. First, reconsideration should be given to the requirement that screening be uniform across all schools. Rather, greater emphasis should be placed on using measures which directly assess the skills needed to function in the particular program provided by a given school. This seems reasonable, and even desirable, given that the services currently provided vary greatly in both content and delivery mode. Rather than seeking uniformity in screening, the goal should be to assure that the screening procedures appropriately measure the particular content and objectives of the program to be delivered. This approach would not negate the possibility of using some common core of measures for screening across all schools, but it would imply that the common core should be supplemented by measures which vary as a function of variations in programs provided.

Second, in selecting measures, consideration should be given to using instruments and assessment approaches not currently included in the current systemwide screening procedures. Of special concern is the inclusion of instruments better able to identify gifted Hispanic and black students. At least three types of assessments come to mind which warrant further consideration: measures of creativity, measures of specific content skills, and work samples.

MEASURES OF CREATIVITY

As part of a special project designed to identify potentially gifted students among culturally different populations (Program of Assessment, Diagnosis, and Instruction), staff of the Gifted and Talented Program are experimenting with alternative screening approaches. One component of the process is to gather performance data on tests designed to measure creativity, which is defined to include characteristics such as curiosity, flexibility, independence, and originality. In this project, these instruments are being used to identify students for special instruction who show the potential for academic giftedness, not for direct entry into gifted and talented programs. It is not unreasonable to suggest, however, that measures of creativity might be useful as direct indicators of giftedness. Indeed, one might suggest that it is for the academically creative student that special services should be provided as well as (or instead of) for the student with general academic talent. Given these considerations, further exploration of this area seems warranted.

MEASURES OF SPECIFIC CONTENT SKILLS

At the secondary school level, it is not uncommon to select students for special programs based mainly on performance in a specific content area, rather than general academic functioning. A candidate for advanced placement in mathematics, for instance, does not have to be a high achiever in English to gain access to the advanced mathematics program. At the elementary level, however, it is current practice to require a high degree of general academic proficiency regardless of the specific nature of the program. While this approach may be well suited to some programs, for others it may indeed be a mismatch. Consideration should, therefore, be given to more closely linking the skill areas tested to the skill areas a program is designed to address, where general academic enrichment is not the goal.

WORK SAMPLES

Most of the performance measures currently used for screening, and even the alternatives described above, can be categorized as "tests of" some skill or behavioral trait. An alternative to this approach is to use work samples designed to assess performance on tasks similar to those with which the student will be dealing in the instructional program which will be provided. For example, if a school is screening candidates for a creative writing program, samples of work produced by the students should be elicited. If the program is intended to broaden problem-solving skills, performance in situations where problem solving is required should be examined. This approach to assessment, while uncommon in MCPS where admittance to programs for the cognitively or academically gifted is concerned, is based directly on the model used by the arts, such as music or dance. In a sense, the study is proposing that the student "audition" for the program.

This year, such an approach is being tried for selection into the Magnet Cluster Program at Burning Tree Elementary School. One component of the screening will be the assessment of student performance in tasks similar to those which will be required during the school year. This is an approach which should be looked at for more broad-based adoption.

With these issues in mind, it is recommended that the following modifications to the Gifted and Talented Selection Process be considered:

- Consideration should be given to modifying or eliminating the current general screening process, which theoretically identifies overall academic giftedness, and replacing it with screening procedures which are more closely attuned to the content and objectives of the actual programs offered. Use of the more specialized screening approach would enable students who are not the high test achievers overall to be more readily selected for programs tapping their particular area of strength, and it is felt that more minority students would legitimately qualify for programs under this type of screening approach.

- Continued efforts should be expended on exploring alternatives to the current means of selecting students, with emphasis placed on identifying students, using both nontest materials and tests which measure competencies not adequately assessed by tests of generalized academic achievement.

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ADDENDUM

When staff of a program being evaluated are not in agreement with the Department of Educational Accountability vis-a-vis findings or recommendations included in a DEA report, the Policy on Educational Accountability provides for staff comments to be included as an addendum to the DEA report.

In accordance with this policy, we provide in this section comments by staff from the Gifted and Talented Program which take issue with some facets of this report.

COMMENTS FROM GIFTED AND TALENTED STAFF

In the spring of 1980, the Office for Instruction and Program Development (OIPD) initiated the collection of data concerning the screening and selection of students for gifted and talented programs and requested that screening data continue to be analyzed each year. The information base provided by analysis of the data in this 1979-80 study led to modifications in the identification process and provided the impetus for the Project to Minimize Socioeconomic and Cultural Barriers in the Education of Gifted and Talented funded first through Title IV-C and now through Block Grant Funding. The Title IV-C on-site evaluation team of the Maryland State Department of Education commended Montgomery County Public Schools for seeking and publishing data which revealed underrepresentation of minority students and for initiating a project which will address the problem in a long-range fashion.

The 1979-80 and 1980-81 studies will again provide data helpful in structuring and improving the implementation of the identification procedures. The Department of Educational Accountability (DEA) has issued this report analyzing the data and making certain conclusions and recommendations. In several respects, the OIPD disagrees with or would wish to annotate the report's analysis and conclusions.

1. The report presents a confusing picture of the lack of consistent implementation of the identification procedures. As revised in the spring of 1981, the identification procedures provide schools the option of using some specific screening procedures with all students. Such use increases the percentage of students in global screening. However, differences between schools which follow the regular global screening procedures and those which decide to use this option are interpreted as evidence of inconsistent implementation of the identification procedures; in fact, this difference suggests only that schools are using different allowable options.

2. The data in this report do reveal that there are schools which do not implement the identification procedures as written. This information confirms the need for better administration and monitoring of the implementation process.

3. The report says "comparison of specific screening data from 1979-80 and 1980-81 shows some improvement for Hispanics but not for blacks in terms of the percentage of their population specifically screened." The following chart taken from Exhibit 7 reveals that enormous improvement is shown in the percentage of the black population specifically screened in 1980-81 compared with 1979-80. While approximately four times as many whites and Asians were specifically screened in 1980-81 compared with 1979-80, almost eight times as many blacks and Hispanics were specifically screened. The percentage of blacks in the sample population who were specifically screened in 1980-81 (51 percent) does fall short of the average (60 percent); still, the improvement shown over the 1979-80 data is significant.

Participation in Specific Screening by Race:
A Comparison of 1979-80 and 1980-81 Data

	Asians	Blacks	Hispanics	Whites
1979-80				
Sample population	889	2,004	606	11,836
Students in specific screening	161	131	61	1,959
Proportion of population	.181	.065	.101	.166
1980-81				
Sample population	211	362	121	2,324
Students in specific screening	145	183	96	1,390
Proportion of population	.687	.506	.793	.598

4. The report indicates that "procedures intended to increase minority participation are having only a slight impact." The following chart is taken from Exhibit 9 of the report. An examination of the chart indicates the increase is 3.5 times greater for blacks and 3.7 times for Hispanic students compared with 3 times greater for Asians and 2.5 times for whites. The figures do continue to show underrepresentation of blacks and Hispanics, but some improvement has occurred.

Selection for Gifted and Talented Programs by Race:
A Comparison of 1979-80 and 1980-81 Data

	Asians	Blacks	Hispanics	Whites
1979-80				
Sample population	889	2,004	606	11,836
Students selected	82	62	19	1,081
Proportion of population	.092	.031	.031	.091
1980-81				
Sample population	211	362	121	2,324
Students selected	58	39	14	548
Proportion of population	.275	.108	.116	.236

5. One school in the 1980-81 study is obviously atypical in the sample. In fact, 54 is the highest percentage ever reported by a school* and data is gathered from every elementary school annually. The data from this school affects the results of this report in two ways. First, the report indicates that the percentage of students now found in gifted and talented programs is 22 as contrasted to 8 in the 1979-80 study. If school five were removed from the data in Exhibit 4, the percentage of students selected for programs would be 16. It does seem that this percentage more accurately reflects the average percentage identified in elementary schools in MCPS. (It should be noted that the difference in percentages reported between 1980-81 and 1979-80 (22 and 8) is the result of schools

*This same school did not fully implement the identification procedures.

screening almost all of their grades in 1980-81 but only 61 percent in 1979-80. Percentages are based on the total school population in both studies, not the number of students in grades screened.)

Second, 100 percent of the students selected for programs in school five were white. If this school were removed from the data in Exhibit 9, the percentage of white students selected for programs would 16 percent, not 23 percent. In this case the number of whites selected in 1980-81 would be 1.7 times the number selected in 1979-80 compared with 3.5 for blacks and 3.7 for Hispanics.

6. The conclusions and recommendations of DEA do not seem to be based upon findings of the report. The report claims both that inconsistency exists and that inconsistency may hamper finding minority students. It then recommends that consistency be abandoned as a goal. MCPS identification procedures reflect the current thinking in the state of Maryland. MSDE has a working draft of minimum standards for identification; one criterion of the document states, "The identification procedures and criteria are clearly stated and uniformly implemented throughout the system."

7. The recommendations include the addition of measures of creativity, content specific skills, and work samples to present procedures in order to identify gifted Hispanic and black students. These additions may assist in improving minority identification. In fact, work samples and performance levels are used by school teams to support professional decision making. However, the principle fallacy in these suggestions is the lack of awareness of the intervening variables at work with culturally diverse groups. Changing the identification procedures will never be the complete answer to more equitable access to gifted and talented programs. The problem is much more complex than simply finding additional measures. A more long-range approach to equitable identification should emphasize early identification of potentially gifted students. What is needed is a program which provides a nurturing educational environment for students who have the potential for successful participation in a gifted program but have not had the experiences or learning environment necessary to prepare them for one. The Program of Assessment, Diagnosis, and Instruction (PADI) was designed to provide such a program and has been operating in two MCPS schools for the last 18 months. Beginning in the 1983-84 school year, the program will be expanded to six additional schools. As the program expands to provide educational experiences for more of the county's minority youth, we expect to see improvement in minority representation in gifted and talented programs. We will be setting interim goals in order to more realistically chart our progress over the coming years.

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SCREENING AND RESCREENING FOR THE GIFTED AND TALENTED PROGRAM
1980-81 AND 1981-82 SCHOOL YEARS

BACKGROUND

In the spring of 1980, the Department of Instructional Planning and Development requested that the Department of Educational Accountability conduct a study of data collected regarding screening and selecting gifted and talented students during the 1979-80 school year. The results of this study, published in March, 1981,[1] yielded the following major findings:

- In the 40 schools involved in the study, 25 percent of the students eligible for inclusion in the screening pool were globally screened, 15 percent participated in specific screening, and 8 percent were selected for programs.[2]

- Asians and whites were overrepresented relative to their population proportions at all levels of the selection process, and black and Hispanic students were underrepresented.

- Male and female students were approximately equally represented in screening and selection across the 40 schools as a whole, but figures for individual schools varied considerably.

- Implementation of the procedures varied considerably across schools and administrative areas.

- Generally, use of standardized achievement tests in screening assisted Asian and white students in selection for gifted and talented programs but did not help and may have harmed blacks and Hispanics. Self-nomination and peer nomination were helpful to black students; and the Renzulli checklists, Raven Progressive Matrices, and CIRCUS subtests assisted blacks and Hispanics in qualifying for programs.

As a result of the findings reported in the DEA study, the Department of Instructional Planning and Development made several changes to their guidelines for screening and selecting students for gifted and talented programs.[3] The changes included the following:

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1. S. Gross and J. Frechtling, Screening for the Gifted and Talented Program: An Examination of the Process and Procedures, Vols. I and II, Department of Educational Accountability, Montgomery County (Md.) Public Schools, March, 1981.

2. See Exhibit 1 for a complete listing of instruments used in global and specific screening.

3. MCPS Procedures for Decision Making in the Identification of Intellectually and Academically Gifted and Talented Students, March, 1981.

EXHIBIT 1

Population Globally Screened by School

School	Number Globally Screened	Percentage of Those Globally Screened	Percentage of School Population	Number Passing Global Screening	Percentage of Those Globally Screened
1	41	2	14	33	83
2	292	14	63	108	37
3	229	11	61	137	60
4	207	10	78	105	51
5	406	19	89	165	41
6	397(a)	18	93	109	28
7	253(b)	12	100(c)	91	36
8	217	10	90	136	63
9	112(d)	5	37(d)	84	75
Total	2,153	100	71	968	45

(a) An additional 34 special education students at School 6 participated in limited screening activities. None of these students were selected for gifted and talented programs, and generally they failed to attain criterion on the various screening instruments. Therefore, it was felt that inclusion of them in this report would detract from the validity of the results.

(b) This school contains only Grades K-3.

(c) More students were screened than are shown in school enrollment figures. This is a result of the high mobility rate at this school.

(d) Only screened students in Grades 4-6.

- o Inclusion of the Raven Progressive Matrices in Grades 2 and 3 for global screening (formerly it was used solely in specific screening).

- o Emphasis on professional decision making for students whose selection decision for gifted and talented programs was not clear-cut.[4]

- o Inclusion of minority students in Grades 3-6 in the specific pool if they have attained one or more of the global criteria (compared to two criteria for whites).

- o Provision of the option for schools to use specific screening instruments in the global screening if they are willing to take on the additional work incurred.

THE PRESENT STUDY

In the spring of 1981 and the spring of 1982, DEA conducted a second study of screening and selection practices for gifted and talented programs. The purposes of this study included examination of the screening and selection processes used by schools in years subsequent to the initial year of screening and selection, reexamination of prior findings with respect to the usefulness of particular instruments/procedures in initial screening and selection, and documentation of changes in practices over a period of time. Specifically, the study focused on the following:

- o Determining whether more black and Hispanic students were being included in the screening and being selected for programs in a more equitable fashion and whether the ratio of males to females was maintained

- o Documenting the extent to which the revised guidelines were being followed

- o Determining whether screening procedures were being implemented more uniformly

- o Reexamining findings in the 1979-80 study regarding the various instruments and procedures

In order to conduct the second study, it was necessary to identify schools that were involved in the initial stages of student identification in 1981-82 (initial screening) as well as a subset of schools that had conducted initial screening activities in prior years and additional screening activities in

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4. Professional decision making suggests individual consideration of students, as well as the possibility of including additional data in the decision-making process.

1981-82 (rescreening) subsequent[5] to the changes in the screening guidelines. Thirteen schools were identified by the Gifted and Talented Program Staff as schools that screened students for the first time in 1980-81.[6] Nine of these schools agreed to participate in the study. Twenty schools were selected at random to submit their data on rescreening activities conducted in 1981-82. Thirteen of these 20 schools agreed to participate in the study. All screening and rescreening data were collected by Central Office Gifted and Talented Staff.

FINDINGS

SUMMARY

The findings indicate that, while some changes have taken place in the screening and selection process over a period of time, serious problems continue to exist in implementing the selection process and that procedures intended to increase minority participation are having only a slight impact. Further, implementation of the screening process continues to be inconsistent across schools. Preliminary examination of the procedures used for rescreening of students suggests that this is an especially problematic area and that many differences exist in how rescreening is conducted. Taken as a whole, the data suggest that serious inequities still exist in the selection of students for gifted and talented programs.

GLOBAL SCREENING, SPECIFIC SCREENING, AND PROGRAM SELECTION: INITIAL SCREENING

The Population Screened and Selected

Screening and Selection by School

Global Screening: Of the 3,019 students enrolled in regular classes in Grades K-6 in the nine schools studied in 1980-81, 71 percent were included in the global screening pool.[7] This is almost three times the proportion of

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5. Rescreening activities include initial screening of students entering the earliest grade in which gifted and talented programs are provided in the school, initial screening of students in other grades who are new to the school, and rescreening of students screened but not selected in prior years.
6. At the time of the study, most elementary schools were well underway in the screening and selection process or had completed their major screening in earlier years.
7. Students may be included in the global screening pool if they show any indication at all of potential for giftedness. Once in the pool, information is gathered from a variety of sources listed in Exhibit 2. Modifications to the global screening process were made in 1980-81. These include (1) relaxing the standard for movement into the specific screening pool (passing global screening) from the attainment of two global screening criteria t criterion if the student is in Grades K-2 or is a minority student; (2) including the Raven Matrices as a global screening criterion in Grades 2 and 3; and (3) relaxing the standard for achievement test scores in Grades K-3, allowing one score of stanine 8 or 9 to indicate attainment of the criterion for all tests vs. two 8's or 9's which was required previously for most tests.

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EXHIBIT 2

Instruments Used in Gifted and Talented Global and Specific Screening

Instruments	Recommended Grades to be Used	Used In Global Screening	Used In Specific Screening	Description of Information/Subtest Used
Nomination Instruments				
Staff nomination (miscellaneous checklists including Renzulli-Smith and Renzulli-Hartman)	K-6	X	X	Teachers respond to a checklist of characteristics such as verbal ability, creativity, reasoning ability and leadership.
Self-nomination	3-6	X		Students complete a form which includes writing a paragraph indicating the reasons they wish to be considered for Gifted and Talented program.
Parent Nomination	K-6	X		Consent form, indicating their wish to have students included included in the screening.
Peer Nomination (classroom survey activity conducted by teacher)	3-6	X		Students nominate peers who seem to know about a lot of different things, who would be best at figuring out what to do in a strange place, or who have the most original or creative ideas.
Raven Progressive Matrices	K-6	X	X	Nonverbal test based on imbedded figures.
Standardized Group Achievement Tests				
Stanford Early School Achievement Test (SESAT)	K-1	X	X	Levels I and II: Environment, Math, and Aural Comprehension
Stanford Achievement Test	2-3	X	X	Primary I - Grade 2: Language, Vocabulary, Reading Comprehension, Math Concepts, Math Application. Primary II-Grade 3: Vocabulary, Reading Comprehension, Math Concepts, Math Application.
Iowa Tests of Basic Skills (ITBS)	4-6	X	X	Vocabulary, Reading Comprehension, Math Concepts, Math Application
California Achievement Test	3-6	X	X	Reading Vocabulary, Reading Comprehension, Math Comprehension, Math Concepts and Application, Total
Cognitive Abilities Test (CAT)	4-6	X	X	Verbal, Quantitative, Nonverbal
Short Form Test of Academic Aptitude (SFTAA)	2-3		X	Language: Vocabulary, Memory. Nonlanguage; Sequences, Analogies. Total
Other Individual or Small Group-Administered Tests				
CIRCUS	K-1		X	How Much and How Many (Quantitative) and Think it Through (Reasoning)

students included in the 1979-80 sample (25 percent), indicating a considerable change in practice over the year's time.

However, inclusion practices varied among the nine schools (see Exhibit 3), with a range of 14 to 100 percent of the student body of the school being included in the global pool.[8]

Specific Screening: The proportion of students included in specific screening in 1980-81 is four times that included in 1979-80.[9] In 1979-80, 15 percent of the schools' population was included in specific screening; in 1980-81, the comparable figure was 60 percent. At least part of this increase is due to the inclusion of virtually all students globally screened in schools 5 and 6 in the specific screening pool. Also, it may be noted that many more students were included in specific screening overall than had actually attained the criterion for passing global screening (1,818 students vs. 968 students), suggesting that professional decision making also may have played a role in this increase from 1979-80 to 1980-81. All schools except school 1 included more students in the specific pool than had passed global screening. However, inclusion practices by school again varied as the range in school proportions specifically screened ranged from 9 to 91 percent.

Program Selection: Not surprisingly, the overall percentage of students selected for gifted and talented programs also increased sharply in 1980-81. In 1980-81, 22 percent of the eligible population in the nine schools was selected for gifted and talented programs (see Exhibit 4), compared to 8 percent of the 1979-80 population. Selection rates did vary considerably by school, however. The proportion of students selected for programs in 1980-81 varied from 10 to 54 percent of each school's population. Variations in proportions of students selected for gifted and talented programs may have several causes: differences in student achievement,[10] changes in screening

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8. Central Office Gifted and Talented Staff reported that based upon review of the information provided by schools for this study, they felt that some schools had neglected to report the names of all students who had been globally screened. Obviously, this factor would impact upon the data that are reported.

9. The purpose of specific screening is to gather additional data on all students who have shown any indication of giftedness in the global screening process. The specific screening process utilizes some of the same data used in global screening, namely test data and peer nomination (but with higher criterion levels in Grades 3-6), and additional data obtained from individually administered tests or from additional teacher ratings of behavior.

10. Examination of schools included in the samples shows no consistent attribute such as student achievement, school location, size, etc. that would account for these changes. Further, analyses of the relationship between California Achievement Test results and percentages of school populations included in gifted and talented programs revealed only a moderate correlation (.55).

EXHIBIT 3

Students Included in Specific Screening by School

School	Number Included in Specific Screening	Percentage of School Population	Percentage of Those Globally Screened
1	27	9	68
2	201	43	69
3	183	49	80
4	204	77	99
5	406	89	100
6	388	91	98
7	156	65	62
8	145	65	67
9	108	39	96
Total	1,818	60	84

EXHIBIT 4

Students Selected for Gifted and Talented Programs by School

School	Number Selected for Program	Percentage of School Population	Percentage of Those Globally Screened
1	29	10	73
2	51	11	18
3	45	12	20
4	44	17	21
5	244	54	60
6	85	20	21
7	67	27*	27
8	50	20	23
9	45	16	40
Total	659	22	31

*Based on 253 students screened, which is more than 100 percent of school enrollment figures.

practices over a period of time, or greater use of professional decision making.[11]

Screening and Selection by Sex

Exhibit 5 contains the screening and selection findings for 1980-81 by sex. When compared with the 1979-80 findings, the participation rates for females are slightly decreased. In 1979-80, 49 percent of those globally screened were female, as were 50 percent of those specifically screened, and 49 percent of those selected. In 1980-81, comparable percentages for females were 49, 48, and 47 percent, respectively.[12]

EXHIBIT 5

Screening and Selection by Sex and School

School	Included in Global Screening		Included in Specific Screening		Selected for Programs	
	%Male	%Female	%Male	%Female	%Male	%Female
1	45	55	44	56	41	59
2	48	52	48	53	43	57
3	47	53	45	55	56	44
4	51	49	51	49	46	55
5	56	44	56	44	59	41
6	52	48	53	47	60	40
7	50	50	53	47	52	48
8	53	48	50	50	44	56
9	53	47	53	47	47	53
Total	51	49	52	48	53	47

11. Students in Grades K-2 who have attained 3 or more specific screening criteria and students in Grades 3-6 who have attained 4 or more criteria must be selected for programs. However, students who fall below these criteria but attain at least 1 specific criterion must be considered individually. Additional information may be brought to bear on the decision, or trial placement in a program may be considered.

12. It is assumed that population proportions for both years approximate 50 percent males, 50 percent females.

Screening and Selection by Race

Global Screening: The 1980-81 global screening data show improvement over the 1979-80 study which found that blacks and Hispanics were somewhat underrepresented in the global pool.

In 1979-80, slightly fewer black and Hispanic students were globally screened than would be expected according to the overall percentage of students included in screening. Twenty-five percent of the sample population was globally screened, but 23 percent of the black students and 20 percent of the Hispanic students were globally screened. In 1980-81, this trend reversed, with 75 percent of the blacks and Hispanics as opposed to 71 percent of the sample population being globally screened. Exhibit 6 shows the distribution by race of students in the sample schools, and the proportions of each racial group included in global screening for both 1979-80 and 1980-81.

Specific Screening: Comparison of specific screening data from 1979-80 and 1980-81 shows improvement for Hispanics and blacks in terms of the percentage of their population specifically screened (see Exhibit 7). However, the data show that black students continue to be underrepresented in the specific screening pool.

The data show that while 60 percent of the 1980-81 sample population was specifically screened, 50 percent of the blacks and 79 percent of the Hispanics were specifically screened. Although these figures are better than 1979-80 (15 percent of the population specifically screened vs. 7 percent of the blacks and 10 percent of the Hispanics), the proportions still fall considerably short of expectation for black students. However, Hispanic students were specifically screened in higher proportions than the overall population (79 vs. 60 percent).

Examination of Exhibit 8 indicates, however, that the overwhelming majority of the students who actually passed the specific screening process in 1980-81 were Asian and white both in terms of their proportionate share of the entire group who passed specific screening and in terms of their respective percentages of their racial groups that were globally screened. Exhibit 8 also shows that twice the proportion of Asians and whites compared to blacks and Hispanics acquired some specific screening credits, regardless of whether or not they passed specific screening. No comparable data are available for 1979-80.

Program Selection: Even though black and Hispanic students had been included in global and specific screening in larger numbers in 1980-81 than previously, the data show that they continue to be seriously underrepresented in program selection. Further, professional decision making, although clearly in evidence, does not appear to be helping black and Hispanic students.

Examination of the data indicates that only half the percentage of blacks (11 vs. 22 percent) and Hispanics (12 vs. 22 percent) were selected for programs in 1980-81 when compared to the overall percentage selected for programs. Asian and white students continue to be overrepresented compared to the sample as a whole. In addition, while 500 students were selected for programs who did not pass specific screening, it appears that this process is more helpful to Asians than to blacks and Hispanics. Fifty-three percent of the Asians who attained at least one specific criterion but did not pass the specific screening were selected for programs. In contrast, 42 percent of the blacks

EXHIBIT 6

Global Screening by Race - 1979-80 and 1980-81

Race	1979-80				1980-81				Students in 1980-81 Who Passed Global Screening**	
	Sample Population by Race*		Students Included in Global Screening		Sample Population by Race*		Students Included in Global Screening			
	Number	%	Number	%***	Number	%	Number	%***	Number	%
Asian	889	6	249	28	211	7	159	75	87	55
Black	2,004	13	467	23	362	12	271	75	114	42
Hispanic	606	4	120	20	121	4	124****	100	37	30
White	11,836	77	2,974	25	2,324	77	1,593	69	730	46
Total*****	15,368	100	3,852	25	3,019	100	2,153	71	968	45

*Population by race in the sample schools.
**Comparable figures not available for 1979-80.
***Percentage of population by race globally screened.
****More Hispanic students screened than contained in data base school enrollments, probably due to high mobility rate in some schools.
*****Total includes Eskimos, American Indians, and students whose race is not known.

EXHIBIT 7

Specific Screening by Race - 1979-80 and 1980-81

Race	1979-80					1980-81				
	Sample Population by Race*		Students Included in Specific Screening			Sample Population by Race*		Students Included in Specific Screening		
	Number	%	Number	%**	% of Those Globally Screened	Number	%	Number	%**	% of Those Globally Screened
Asian	889	6	161	18	65	211	7	145	69	91
Black	2,004	13	131	7	28	362	12	183	50	68
Hispanic	606	4	61	10	51	121	4	96	79	77
White	11,836	77	1,959	17	66	2,324	77	1,390	60	87
Total***	15,368	100	2,326	15	100	3,019	100	1,818		84

*Population by race in the sample schools.
**Percentage of population by race specifically screened.
***Total includes Eskimos, American Indians, and students whose race is not known.

EXHIBIT 8

Specific Screening Results by Race

Race	Students Obtaining One or More Specific Screening Criterion But Not Passing Specific Screening		Students Passing Specific Screening	
	Number	Percentage*	Number	Percentage*
Asian	86	54	12	8
Black	83	31	4	2
Hispanic	42	34	2	2
White	911	57	152	10
	1,122	52	170	8

*Figures are percentages of all students in racial group globally screened.

and 29 percent of the Hispanics were selected for program participation without passing the specific screening criteria. Exhibit 9 shows the racial breakdown of students selected for gifted and talented programs in 1979-80 vs. 1980-81.

The Process

Students Assessed or Nominated by Each Instrument

The data indicate that some changes have been made in the emphasis on the types of screening instruments used, particularly an increase in the use of peer nomination (one of few instruments found in the previous study to assist minority students in the screening process), the Raven Matrices, and the Renzulli-Hartman. However, standardized tests continue to receive heavy use in the screening process, with the Cognitive Abilities Test used for 73 percent of the available pool, the California Achievement Test used for 43 percent,[13] and the ITBS for 61 percent. Exhibit 10 displays the students assessed or nominated by each of the instruments/procedures used in global and/or specific screening, the grade levels in which the instrument or procedure is applicable, and the percentage assessed from the applicable global or specific pool. Further analyses of each of the instruments are presented in Appendix A.

Instruments/Procedures Used by Each School

Exhibit 11 presents the instruments and procedures used by each school. These data illustrate the continued emphasis on the standardized tests in the screening and selection process. All nine schools used the standardized tests and the Raven Matrices, but three of the schools (schools 4, 5, and 6) used no additional global nomination procedures except peer nomination; and a fourth school (school 1) used only parent nomination.

GLOBAL SCREENING, SPECIFIC SCREENING, AND PROGRAM SELECTION: RESCREENING CONDUCTED IN 1981-82

Once the major screening activities have been completed for the first time in a school, procedures for screening students in subsequent years take two forms: 1) initial screening, including the complete global screening, specific screening, and selection for programs of the incoming class of students in the earliest grade in the school in which gifted and talented programs are offered; and 2) rescreening of students in other grades who were previously screened and initial screening of students new to the school in these grade levels. The screening and selection data presented in this report are for the rescreening/screening activities in the grade levels other than the earliest incoming grade for the 13 schools that reported their activities. Findings for the initial screening of students in the earliest grade served are presented in Appendix B.

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13. Use of the California Achievement Test is not fully reflected here since such a large percentage of the students had been tested using the ITBS prior to the MCPS testing changeover.

EXHIBIT 9

Program Selection by Race - 1979-80 and 1980-81

Race	1979-80					1980-81				
	Sample Population by Race*		Students Selected for Programs			Sample Population by Race*		Students Selected for Programs		
	Number	%	Number	%**	% of Those Globally Screened	Number	%	Number	%**	% of Those Globally Screened
Asian	889	6	82	9	33	211	7	58	28	37
Black	2,004	13	62	3	13	362	12	39	11	14
Hispanic	606	4	19	3	16	121	4	14	12	11
White	11,836	77	1,081	9	36	2,324	77	548	24	34
Total***	15,368	100	1,257	8	33	3,019	100	659	22	31

*Population by race in the sample schools.
**Percentage of population by race selected for programs.
***Total includes Eskimos, American Indians, and students whose race is not known.

EXHIBIT 10

Populations Assessed by Global and Specific Screening Instruments

Instrument	Grades Used	Number of Schools in Which Used	Number of Students Screened	Percentage of Available Pool*
Staff Nomination	K-6	3	451	21
Self-nomination	4-6	3	451	39
Parent Nomination	K-6	6	1,143	53
Peer Nomination	3-6	8	1,542	99
Nomination by Others in the School	K-6	4	874	41
Nomination by Others in the Community	K-6	1	217	10
SESAT	K-2	1	12	2
Stanford Achievement Test	2-3	1	7	1
ITBS	4-6	9	700	61
California Achievement Test	3-6	9	670	43
Cognitive Abilities Test	4-6	9	843	73
Short Form Test of Academic Aptitude	2-6	9**	501	26
Raven Matrices	K-6	9	2,019	96***
Renzulli-Smith	K-1	1	50	22
Renzulli-Hartman	2-6	8	1,240	78
CIRCUS-Think it Through	K-1	3	86	38
CIRCUS-How Much and How Many	K-1	3	130	58

*Available pool represents the number of students in the respective global and/or specific pool for the grade levels in which instrument is used.

**Not used in Grades 4-6 in four schools.

***Includes global pool for Grades 2 and 3 and specific pool for all other grades.

EXHIBIT 11

Instruments/Procedures Used by School

Instrument	School: 1	2	3	4	5	6	7	8	9
Staff Nomination		X						X	X
Self-nomination		X	X					X	
Parent Nomination	X	X	X				X	X	X
Peer Nomination		X	X	X	X	X	X	X	X
Nomination by Others in the School							X	X	X
Nomination by Others in the Community								X	
SESAT	X								
Stanford Achievement Test	X								
ITBS	X	X	X	X	X	X	X	X	X
California Achievement Test	X	X	X	X	X	X	X	X	X
Cognitive Abilities Test	X	X	X	X	X	X	X	X	X
Short Form Test of Academic Aptitude	X	X	X	X	X	X	X	X	X
Raven Matrices	X	X	X	X	X	X	X	X	X
Renzulli-Smith							X		
Renzulli-Hartman		X	X	X	X	X	X	X	X
CIRCUS-Think It Through				X	X	X			
CIRCUS-How Much and How Many				X	X	X			

The Population Rescreened and Selected

Rescreening and Selection Overall

Exhibit 12 illustrates the grade levels by school in which rescreening activities took place in grades other than the earliest incoming grade. With the exception of schools 3, 6, and 9, rescreening activities took place in all appropriate grade levels. Exhibit 13 presents the rescreening and selection data by school. Fourteen percent of the students in grades other than the incoming grade were included in the global rescreening, 13 percent were included in specific rescreening, and 3 percent were selected for programs. By school there was considerable variation, particularly in global rescreening, where from 8 to 100 percent were rescreened.

Rescreening and Selection by Race

Exhibit 14 presents the population of the 13 schools broken down by racial group. Exhibits 15 through 17 present the racial proportions by school who were included in global and specific rescreening and who were selected for programs. The data show that, while black students were overrepresented in global rescreening (15 percent of this group vs. 11 percent of the population in the 13 schools), they were underrepresented among those selected for programs (4 percent of that group).

Hispanic students, who comprised 4 percent of the population of the 13 schools, represented 4 percent of the students included in global rescreening and 4 percent of those selected for programs. Asian students were overrepresented among those selected for programs (10 percent vs. 5 percent of the population in the 13 schools), as were whites (82 percent of those selected vs. 79 percent of the school's population).

EXHIBIT 12

Rescreening by School and Grade

School	1	2	3	4	5	6
1	X	X	X	X	X	
2			X	X	X	X
3					X	
4		X	X	X	X	X
5			X	X	X	X
6				X	X	X
7	X	X				
8		X	X	X	X	
9	X		X		X	
10	X	X	X	X	X	X
11		X	X	X	X	X
12	X	X	X			
13		X	X	X	X	X

EXHIBIT 13

Global and Specific Rescreening and Selection for Programs in Grades Other than Earliest Incoming Grade by School

School	Students Globally Rescreened		Students Specifically Rescreened		Students Selected for Programs	
	No.	Percentage of Students in Grades Beyond Earliest Grade	No.	Percentage of Students in Grades Beyond Earliest Grade	No.	Percentage of Students in Grades Beyond Earliest Grade
1	(a)		47(b)	15	16(b)	5
2	28	9	16	5	4	1
3	28	8	28	8	4	1
4	65	18	59	16	17	5
5	42	14	42	14	2	1
6	65	37	51	29	13	7
7	118	100(c)	41	37	11	10
8	71	32	46	20	7	3
9	21	9	21	9	5	2
10	38	9	38	9	7	2
11	26	8	12	4	8	2
12	(d)	-	27	16	10	6
13	(d)	-	61	17	17	5
TOTAL	502	14	489	13	121	3

(a) Globally screened all students in Grades 1-3, but no detailed figures were provided.

(b) Forty-seven students in Grades 1-3 in this school were included in specific rescreening. For Grades 4 and 5, students who were not previously identified were included in gifted and talented programs if they got 9's on the California Achievement Test. However, no figures were provided regarding the number of fourth- and fifth-grade students selected in this manner.

(c) More students rescreened than school enrollment due to high mobility rate.

(d) No indication of global screening having been conducted.

EXHIBIT 14

Percentage of Students by Race and School for the Rescreening Sample of Schools

School	Asian	Black	Hispanic	Other
1	8%	11%	4%	77%
2	0(a)	6	1	93
3	5	15	2	79
4	8	10	2	80
5	4	13	1	82
6	6	10	7	77
7	9	34	12	45
8	7	10	6	77
9	5	4	13	78
10	7	10	1	83
11	2	1	1	96
12	8	39	19	34
13	8	6	5	81
TOTAL	5	11	4	79

(a) Percentage less than half of 1 percent.

EXHIBIT 15

Students Included in Global Rescreening by School and Race

School	Total Included in Global Rescreening	Percentage of Students in Grades Other Than Earliest Incoming Grade	Asian		Black		Hispanic		White	
			Number Rescreened	Percentage of Those Rescreened	Number Rescreened	Percentage of Those Rescreened	Number Rescreened	Percentage of Those Rescreened	Number Rescreened	Percentage of Those Rescreened
1	(a)									
2	28	9	0	0	5	18	0	0	23	82
3	28	8	3	11	2	7	1	4	22	79
4	65	18	11	17	2	3	1	2	51	78
5	42(b)	14	1	2	3	7	2	5	33	79
6	65	37	3	5	6	9	3	5	53	81
7	118	100	13	11	42	36	9	7	54	46
8	71	32	6	8	11	16	1	1	53	75
9	21	9	0	0	0	0	2	10	19	90
10	38	9	4	11	2	5	0	0	32	84
11	26	8	0	0	2	8	0	0	24	92
12	(c)	-								
13	(c)	-								
Total	502	14	41	8	75	15	19	4	364	73

(a) Globally screened all students in Grades 1-3, but no detailed figures were provided.
(b) Race unknown for 2 of these students.
(c) No indication of global screening having been conducted.
(d) Percentage less than half of one percent.

EXHIBIT 16

Students Included in Specific Rescreening by School and Race

School	Total Included in Specific Rescreening	Percentage of Students in Grades Other Than Earliest Incoming Grade	Asian		Black		Hispanic		White	
			Number Rescreened	Percentage of Those Rescreened	Number Rescreened	Percentage of Those Rescreened	Number Rescreened	Percentage of Those Rescreened	Number Rescreened	Percentage of Those Rescreened
1	47(a)	15	1	2	1	2	1	2	44	94
2	16	5	0	0	2	13	0	0	14	87
3	28	8	3	11	2	7	1	4	22	79
4	59	16	10	17	2	3	1	2	46	78
5	42(b)	14	1	2	3	7	2	5	34	81
6	51	29	1	2	6	12	3	6	41	80
7	41	37	6	15	13	32	3	7	19	46
8	46	20	5	11	9	20	1	2	31	67
9	21(c)	9	0	0	0	0	2	10	19	90
10	38(c)	9	4	11	2	5	0	0	32	84
11	12	4	0	0	0	0	0	0	12	100
12	27	16	2	7	10	37	5	19	9	33
13	61	17	8	13	7	11	7	11	39	64
Total	489	13	41	8	57	12	26	5	362	74

(a) Forty-seven students in Grades 1-3 in this school were included in specific rescreening/screening. For grades 4 and 5, students who were not previously identified were included in Gifted and Talented programs if they got 9's on the California Achievement Test.

(b) Race unknown for two of the students.

(c) Same students globally and specifically rescreened/screened.

(d) Percentage less than half of one percent.

EXHIBIT 17

Percentage of Students Selected for Programs as a Result of Rescreening by School and Race

School	Total Selected	Percentage of Students In Grades Other Than Earliest Incoming Grade	Asian		Black		Hispanic		White	
			Number Selected	Percentage of Those Selected	Number Selected	Percentage of Those Selected	Number Selected	Percentage of Those Selected	Number Selected	Percentage of Those Selected
1	16(a)	5	1	6	0	0	0	0	15	94
2	4	1	0	0	0	0	0	0	4	100
3	4	1	2	50	0	0	0	0	2	50
4	17	5	3	18	0	0	0	0	14	82
5	2	1	0	0	0	0	0	0	2	100
6	13	7	0	0	1	8	0	0	12	92
7	11	10	1	9	3	27	0	0	7	64
8	7	3	1	14	0	0	0	0	6	86
9	5	2	0	0	0	0	1	20	4	80
10	7	2	2	29	0	0	0	0	5	71
11	8	2	0	0	0	0	0	0	8	100
12	10	6	0	0	1	10	2	20	7	70
13	17	5	2	12	0	0	2	12	13	76
Total	121	3	12	10	5	4	5	4	99	82

(a) Sixteen students selected in Grades 1-3 in this school. No figures were provided regarding numbers of students in Grades 4-5 identified by the California Achievement Test.

The Process

Instruments/Procedures Used in Global Rescreening

Exhibit 18 presents the instruments used in the 13 schools for global rescreening[14]. Although most of the schools conducting global rescreening used a variety of instruments, 2 schools used only the Raven Matrices in global rescreening. Moreover, in one of these schools (school 5), the Raven Matrices was the only instrument used in global and specific rescreening.

Schools also differed in the extent to which parent nomination and parent permission were used as criteria in screening.[15] In four of the 13 schools, neither parent nomination nor parent permission were utilized. Two schools (15 percent) included parent nomination in global rescreening but did not obtain parental permission for specific rescreening; and conversely, two schools (15 percent) did not use parent nomination but sought parental permission. In the remaining five schools (38 percent), both parent nomination and parent permission were utilized.

Thirty-three students from 4 of the 13 schools who had attained the global screening criteria were not specifically rescreened due to lack of parental permission. Among these 33 students, there were 27 white students (82 percent), 5 Asians (15 percent), and 1 black student (3 percent). Had these students been enrolled in schools not requiring this permission, they might well be included in programs today.

One final observation about the use of instruments is also worthy of note. The data show that those schools employing the California Achievement Test and Cognitive Abilities Test in global screening also relied upon parent, staff, and peer nomination as sources of data. This reliance on the nomination criteria in addition to test data is a departure from the typical pattern observed in initial screening, namely, heavier reliance on staff recommendations and test scores to the exclusion of parent and peer data.

Instruments/Procedures Used in Specific Rescreening

Exhibit 19 presents the instruments used in the 13 schools for specific rescreening/screening. Instruments/procedures used most frequently among the schools were the Raven Matrices, the Short Form Test of Academic Achievement (SFTAA), and the Renzulli-Hartman teacher checklist. The California Achievement Test, Cognitive Abilities Test, and peer nomination were utilized somewhat less frequently in the specific rescreening, and where they were utilized, they tended to be used in combination with the Raven, SFTAA, and Renzulli-Hartman.

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14. Ten schools provided global rescreening data for analysis; an eleventh school (school 1) globally rescreened students but provided no data, and two schools (12 and 13) did not globally rescreen students.

15. Parent permission to include students in specific screening is required unless the total grade is being specifically screened. None of the 13 schools specifically screened entire grades of students.

EXHIBIT 18

Instruments/Procedures Used in Global Rescreening by School and Grade

School	Parent Nomination	Staff Nomination	Peer Nomination	Self-nomination	California Achievement Test	Cognitive Abilities Test	Raven Matrices	Parent Permission
1								X[a]
2							3,4,5,6	
3			5		5	5		
4	2,3,4, 5,6[b]	2,3,5,6	3,4,5,6		3,4,5,6	4,5,6	2,3	X
5							3,4,5,6[c]	
6	4,5,6	4,5,6	4,5,6	4,5,6	4,5,6	4,5,6		X
7	2	1,2					1,2	X
8	2,3,4,5	2,3	3,4,5		3,4,5	4,5	2,3	
9	1,3,5		3,5		3,5	5	3	X
10	1,2,3,4, 5,6	3,5	3,4,5,6		3,4,5	4	2,3	X
11		2,3,4,5,6			3,4,5,6	3,4,5,6	2,3	X
12								
13								

(a) X=Parent permission required before student could be included in specific screening.
(b) Numbers in cells are grades in which instrument/procedure was used.
(c) In this school, only the Raven Matrices was administered to students in Grades 3-6 as part of the rescreening activities. The Raven score was used in addition to whatever test scores or old screening data were available for the students.

EXHIBIT 19

Instruments/Procedures Used in Specific Rescreening by School and Grade

School	Peer Nomination	California Achievement Test	Cognitive Abilities Test	Raven Matrices	(a) SFTAA	Renzulli-Smith	Renzulli-Hartman	CIRCUS	Stanford Achievement Test	(b) SESAT	(c) Other
1		4,5		1,2,3	2,3	1	2,3	1	2,3	1	1,2
2		3,4,5,6	4	3,4,5,6	3,4,5,6		3,4,5,6				
3	5	5	5	5	5		5				
4	3,4,5,6	4,5,6	4,5,6	2,3,4,5,6	2,3,4,5,6		2,3,4,5,6				
5				3,4,5,6							
6	4,5,6	4,5,6	4,5,6	4,5,6	4,5,6		4,5,6				
7				1,2	2	1	2	1			
8	3,4,5	3,4,5	4,5	2,3,4,5	2,3		2,3,4,5				
9	3,5	3,5	5	1,3,5	3	1	3,5	1			
10	3,4,5,6	3,4,5	4	1,2,3,4,5,6	2,3,4,5,6		2,3,4,5,6				
11		3,4,5,6	3,4,5,6	2,3,4,5,6	2,3,4,5,6		2,3,4,5,6				
12				1,2,3	2,3			1			
13	3,4,5,6	3,4,5,6	4	2,3,4,5,6	2,3,4,5,6		2,3,4,5,6				

(a) SFTAA = Short Form Test of Academic Achievement
(b) SESAT = Stanford Early School Achievement Test
(c) Other = Kough Dehaan and Boehm
(d) Numbers in cells are grades in which instrument is used.

Examination of the specific rescreening/screening data indicates that use of the instruments/procedures in specific rescreening/screening was not uniform across the 13 schools. Specifically, differences were found in the use of the California Achievement Test, the Short Form Test of Academic Achievement (SFTAA), and the Renzulli-Hartman teacher checklist. The differences, for the most part, concerned the subtests used and the "cut-score" values considered sufficient for attainment of the specific criterion.

For example, there was no uniformity in the way the California Achievement Test results were included in the specific screening process in the 10 schools in which it was utilized. Five scores are available for inclusion in the decision-making process for the California: four subtests and the total score. MCPS guidelines suggest two or more of these scores be at stanine 9 for attainment of the specific criterion. Only one school (10 percent) considered all five scores in this process, while the remaining nine schools (90 percent) utilized information only from the four subtest scores. In two of the schools (20 percent), two subtest scores of stanine 8 or better sufficed as a specific screening criterion; in one school (10 percent) one score at stanine 9 sufficed. The remaining seven schools (70 percent) considered two scores at stanine 9 for attainment of the specific criterion.[16] Thus, based upon the luck of the draw regarding the school in which the testing took place, students would either attain or not attain a specific criterion via the California Achievement Test. Similar differences were found for the SFTAA results.

Three subtests are contained in the Renzulli-Hartman checklist, and MCPS guidelines suggest attainment of two out of three cutoff scores for the specific criterion. Three (25 percent) of the 12 schools in which the Renzulli-Hartman was administered considered attainment of only one cutoff score sufficient for the specific criterion. By contrast, in three other schools, the Renzulli-Hartman was not completed for the student unless he/she had already attained a specific criterion on either the Raven matrices or the SFTAA. Thus, in these schools, the Renzulli-Hartman was used as the final cut, rather than as one of several criteria to be employed in professional decision making.

Program Selection

The MCPS guidelines for gifted and talented screening and selection suggest attainment of three or more specific criteria for program selection in Grades K-2 and four or more for Grades 3-6. In examination of the rescreening/screening data, differences were found between schools in implementation of this guideline as well.

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16. One of these seven schools utilized the California Achievement Test as the sole rescreening criterion in Grades 4 and 5. According to the school principal, students in these grades who had not previously been selected for gifted and talented programs were automatically included if they obtained two or more stanine 9 scores on the California. By use of this process the principal indicated that many more students were enabled to be included in his school's Gifted and Talented Program.

In eight of the schools (62 percent), it appears that attainment of three specific criteria was the cutoff score for automatic program selection, regardless of grade level. In these schools, some students with fewer than three criteria were given special consideration by committee for program selection. The remaining five schools departed further from the selection guidelines. School 1 employed only the California Achievement Test results as a screening device in Grades 4 and 5 (see footnote 23). School 3's students participated in an area-based pullout program that had very few openings. Thus, students in this school were required to attain five specific criteria for program candidacy.[17] Schools 7 and 12, whose student bodies tended to be lower achieving than the MCPS average on standardized tests, considered two criteria sufficient for program selection. School 13, whose student body tended to be more highly achieving on standardized tests than the MCPS average, also considered two criteria sufficient for program selection. These data only serve to emphasize, once again, the differences in practice across the MCPS schools.

The Use of Professional Decision Making

The use of professional decision making in rescreening appears to be helping the white students substantially more than it is helping minority students.[18] Of the 121 students selected for programs in the 13 schools as a result of rescreening, 11 students from 4 schools had notations next to the selection decision indicating additional input from the selection committee in the decision making. The 11 students, who all had fewer than the normally required criteria for selection, were comprised of 10 whites (91 percent) and 1 Asian (9 percent).

Eight students from two additional schools who did not have the required number of criteria had "maybe" noted as a decision. Of these, there were seven whites (88 percent) and one Hispanic (13 percent).

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17. A student in this school who was considered eligible for the Gifted and Talented Program by school staff was allowed to take the SFTAA four times until she "finally got a stanine 9 score" and could qualify for the program.

18. The teacher responsible for the Gifted and Talented Program in one school reported to DEA that in the past minority students received "an additional point" in the selection process. She indicated, however, that this practice is not being followed this year (1982-83).

CONCLUSIONS AND RECOMMENDATIONS

Two major findings emerge from the analyses:

- Implementation of the screening processes continues to be inconsistent across schools and diverges from the countywide guidelines. The lack of consistency is even more severe where rescreening is involved.

- Despite efforts on the part of school staffs to include minority students in the screening pools, these students, particularly blacks and Hispanics, are not being selected for program participation in representative numbers.

These findings lead us to raise some very fundamental questions about screening and the approach that Montgomery County has, to date, adopted. While it is clear that there are some very understandable reasons for trying to implement a uniform procedure which relies in large part on standardized achievement test instruments, the procedure as it now stands must be questioned from three perspectives.

- There is no evidence that the present criterion used for performance on the standardized tests discriminates between students who can succeed in gifted and talented programs and students who cannot.

- Given what is known about the performance of minority students on most standardized achievement tests, it is likely that black and Hispanic students will continue to be underrepresented in gifted and talented programs as long as selection continues to be based in large part on these instruments.

- Uniformity of implementation is very difficult to achieve, and the tendency of schools to modify the screening procedures has been documented repeatedly. While some of the modifications clearly appear to be less than desirable, the possibility that greater local flexibility might well serve a positive purpose cannot be dismissed.

Therefore, it is time to take a very serious look at the current screening process and to reexamine some critical issues. First, reconsideration should be given to the requirement that screening be uniform across all schools. Rather, greater emphasis should be placed on using measures which directly assess the skills needed to function in the particular program provided by a given school. This seems reasonable, and even desirable, given that the services currently provided vary greatly in both content and delivery mode. Rather than seeking uniformity in screening, the goal should be to assure that the screening procedures appropriately measure the particular content and objectives of the program to be delivered. This approach would not negate the possibility of using some common core of measures for screening across all schools, but it would imply that the common core should be supplemented by measures which vary as a function of variations in programs provided.

Second, in selecting measures, consideration should be given to using instruments and assessment approaches not currently included in the current systemwide screening procedures. Of special concern is the inclusion of

instruments better able to identify gifted Hispanic and black students. At least three types of assessments come to mind which warrant further consideration: measures of creativity, measures of specific content skills, and work samples.

Measures of Creativity

As part of a special project designed to identify potentially gifted students among culturally different populations (Program of Assessment, Diagnosis, and Instruction), staff of the Gifted and Talented Program are experimenting with alternative screening approaches. One component of the process is to gather performance data on tests designed to measure creativity, which is defined to include characteristics such as curiosity, flexibility, independence, and originality. In this project, these instruments are being used to identify students for special instruction who show the potential for academic giftedness, not for direct entry into gifted and talented programs. It is not unreasonable to suggest, however, that measures of creativity might be useful as direct indicators of giftedness. Indeed, one might suggest that it is for the academically creative student that special services should be provided as well as (or instead of) for the student with general academic talent. Given these considerations, further exploration of this area seems warranted.

Measures of Specific Content Skills

At the secondary school level, it is not uncommon to select students for special programs based mainly on performance in a specific content area, rather than general academic functioning. A candidate for advanced placement in mathematics, for instance, does not have to be a high achiever in English to gain access to the advanced mathematics program. At the elementary level, however, it is current practice to require a high degree of general academic proficiency regardless of the specific nature of the program. While this approach may be well suited to some programs, for others it may indeed be a mismatch. Consideration should, therefore, be given to more closely linking the skill areas tested to the skill areas a program is designed to address, where general academic enrichment is not the goal.

Work Samples

Most of the performance measures currently used for screening, and even the alternatives described above, can be categorized as "tests of" some skill or behavioral trait. An alternative to this approach is to use work samples designed to assess performance on tasks similar to those with which the student will be dealing in the instructional program which will be provided. For example, if a school is screening candidates for a creative writing program, samples of work produced by the students should be elicited. If the program is intended to broaden problem-solving skills, performance in situations where problem solving is required should be examined. This approach to assessment, while uncommon in MCPS where admittance to programs for the cognitively or academically gifted is concerned, is based directly on the model used by the arts, such as music or dance. In a sense, the study is proposing that the student "audition" for the program.

This year, such an approach is being tried for selection into the Magnet Cluster Program at Burning Tree Elementary School. One component of the

screening will be the assessment of student performance in tasks similar to those which will be required during the school year. This is an approach which should be looked at for more broad-based adoption.

With these issues in mind, it is recommended that the following modifications to the Gifted and Talented Selection Process be considered:

- Consideration should be given to modifying or eliminating the current general screening process, which theoretically identifies overall academic giftedness, and replacing it with screening procedures which are more closely attuned to the content and objectives of the actual programs offered. Use of the more specialized screening approach would enable students who are not the high test achievers overall to be more readily selected for programs tapping their particular area of strength, and it is felt that more minority students would legitimately qualify for programs under this type of screening approach.

- Continued efforts should be expended on exploring alternatives to the current means of selecting students, with emphasis placed on identifying students using both nontest materials and tests which measure competencies not adequately assessed by tests of generalized academic achievement.

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APPENDIX A

Statistical Analyses by Screening Instrument/Procedure

Criterion: Staff Nomination
Number of Students Screened Using Criterion: 451
Number of Students in Global Pool: 2,153
Percentage of Global Pool Screened Using Criterion: 21

Attainment of Global Criterion		Number and Percentage Passing Global Screening		Number and Percentage Requiring Professional Decision Making		Number and Percentage Passing Specific Screening		Number and Percentage Selected for Program	
	Number	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Yes	132	122	92	69	52	28	21	64	49
No	319	139	44	124	39	11	3	46	14
Criterion Not Used									
	1,702	707	42	930	55	131	8	549	32

Criterion: Self-nomination
Number of Students Screened Using Criterion: 451
Number of Students in Global Pool: 1,154
Percentage of Global Pool Screened Using Criterion: 39

Attainment of Global Criterion		Number and Percentage Passing Global Screening		Number and Percentage Requiring Professional Decision Making		Number and Percentage Passing Specific Screening		Number and Percentage Selected for Program	
	Number	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Yes	81	72	89	34	42	14	17	26	32
No	370	174	47	191	52	37	10	68	18
Criterion Not Used									
	1,103	316	29	396	36	83	8	280	25

Criterion: Parent Nomination
Number of Students Screened Using Criterion: 1,143
Number of Students in Global Pool: 2,153
Percentage of Global Pool Screened Using Criterion: 53

Attainment of Global Criterion		Number and Percentage Passing Global Screening		Number and Percentage Requiring Professional Decision Making		Number and Percentage Passing Specific Screening		Number and Percentage Selected for Program	
	Number	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Yes	259	245	95	159	61	53	20	148	57
No	884	344	39	368	52	50	6	138	16
Criterion Not Used									
	1,010	379	38	596	59	67	7	373	37

Criterion: Peer Nomination
Number of Students Screened Using Criterion: 1,542
Number of Students in Global Pool: 1,551
Percentage of Global Pool Screened Using Criterion: 99

Attainment of Global Criterion		Number and Percentage Passing Global Screening		Number and Percentage Requiring Professional Decision Making		Number and Percentage Passing Specific Screening		Number and Percentage Selected for Program	
	Number	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Yes	424	370	87	250	59	117	28	242	57
No	1,108	358	32	578	52	14	1	230	21
Attainment of Specific Criterion**									
Yes	248	224	90	142	57	105	42	166	67
No	1,294	504	39	686	53	26	2	306	24
Criterion Not Used									
	9	6	67	8	89	0	0	6	67

*Five or more nominations.
**Eight or more nominations.

Criterion: Nomination by Others in the School
Number of Students Screened Using Criterion: 874
Number of Students in Global Pool: 2,153
Percentage of Global Pool Screened Using Criterion: 41

Attainment of Global Criterion		Number and Percentage Passing Global Screening		Number and Percentage Requiring Professional Decision Making		Number and Percentage Passing Specific Screening		Number and Percentage Selected for Program	
	Number	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Yes	78	71	91	45	58	16	21	56	72
No	796	348	44	305	38	30	4	157	20
Criterion Not Used									
	1,279	549	43	773	60	124	10	446	35

Criterion: Nomination by Others in the Community
Number of Students Screened Using Criterion: 217
Number of Students in Global Pool: 2,153
Percentage of Global Pool Screened Using Criterion: 10

Attainment of Global Criterion		Number and Percentage Passing Global Screening		Number and Percentage Requiring Professional Decision Making		Number and Percentage Passing Specific Screening		Number and Percentage Selected for Program	
	Number	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Yes	3*	3	100	3	100	0	0	2	67
No	214	133	62	81	38	22	10	48	22
	1,936**	832	43	1,067	55	158	8	609	32

*Number of students screened using this criterion at one school.
**Number of students at other schools in the sample.

Criterion: Stanford Early School Achievement Test (SESAT) - Environment, Math, Aural Comprehension
Number of Students Screened Using Criterion: 12
Number of Students in Global Pool: 602*
Percentage of Global Pool Screened Using Criterion: 2

Attainment of Global Criterion**		Number and Percentage Passing Global Screening		Number and Percentage Requiring Professional Decision Making		Number and Percentage Passing Specific Screening		Number and Percentage Selected for Program	
	Number	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Yes	12	12	100	9	75	3	25	10	83
No	0	-	-	-	-	-	-	-	-
Attainment of Specific Criterion**									
Yes	12	12	100	9	75	3	25	10	83
No	0	-	-	-	-	-	-	-	-
Criterion Not Used									
	590	222	38	278	47	36	6	171	29

*Number of students included in global screening in Grades K, 1, and 2.
**Global and specific criteria are the same: one or more stanine scores of 8 or more.

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Criterion: Stanford Achievement Test - Vocabulary, Reading Compression, Math Concepts, Math Problem Solving
Number of Students Screened Using Criterion: 7
Number of Students in Global Pool: 766*
Percentage of Global Pool Screened Using Criterion: 1

Attainment of Global Criterion**		Number and Percentage Passing Global Screening		Number and Percentage Requiring Professional Decision Making		Number and Percentage Passing Specific Screening		Number and Percentage Selected for Program	
	Number	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Yes	7	5	71	7	100	0	0	6	86
No	0	-	-	-	-	-	-	-	-
Attainment of Specific Criterion***									
Yes	7	5	71	7	100	0	0	6	86
No	0	-	-	-	-	-	-	-	-
Criterion Not Used									
	759	369	49	366	48	48	6	207	27

*Number of students included in global screening in Grades 2 & 3.
**A stanine score of 8 or more on 2 subtests.
***A score of stanine 9 on 2 subtests.

Criterion: Iowa Tests of Basic Skills - Vocabulary, Reading Comprehension, Math Concepts, Math Problem Solving
Number of Students Screened Using Criterion: 700
Number of Students in Global Pool: 1,154
Percentage of Global Pool Screened Using Criterion: 61

Attainment of Global Criterion*		Number and Percentage Passing Global Screening		Number and Percentage Requiring Professional Decision Making		Number and Percentage Passing Specific Screening		Number and Percentage Selected for Program	
	Number	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Yes	311	29	94	206	66	76	24	192	62
No	389	88	23	186	48	3	0	50	13
Attainment of Specific Criterion**									
Yes	107	105	98	44	41	63	59	89	83
No	593	274	46	348	59	16	3	153	26
Criterion Not Used									
	454	183	40	249	55	35	8	132	29

*Stanine 8 or more on at least 2 subtests.
**Stanine 9 on at least 2 subtests.

Criterion: California Achievement Test - Reading Vocabulary, Reading Comprehension, Math Computation, Math Concepts and Application, Total
Number of Students Screened Using Criterion: 670
Number of Students in Global Pool: 1,551
Percentage of Global Pool Screened Using Criterion: 43

Attainment of Global Criterion*		Number and Percentage Passing Global Screening		Number and Percentage Requiring Professional Decision Making		Number and Percentage Passing Specific Screening		Number and Percentage Selected for Program	
	Number	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Yes	253	196	78	186	74	48	19	177	70
No	417	113	27	189	45	1	0	41	10
Attainment of Specific Criterion**									
Yes	146	109	75	102	70	44	30	124	85
No	524	200	38	273	52	5	1	94	18
Criterion Not Used									
	881	425	48	461	52	82	9	260	30

*Stanine 8 or more on at least 2 subtests and/or total.
**Stanine 9 on at least 2 subtests and/or total.

Criterion: Cognitive Abilities Test - Verbal, Quantitative, Nonverbal
Number of Students Screened Using Criterion: 843
Number of Students in Global Pool: 1,154
Percentage of Global Pool Screened Using Criterion: 73

Attainment of Global Criterion*		Number and Percentage Passing Global Screening		Number and Percentage Requiring Professional Decision Making		Number and Percentage Passing Specific Screening		Number and Percentage Selected for Program	
	Number	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Yes	522	417	80	355	68	101	19	270	52
No	321	68	21	114	36	1	0	16	5
Attainment of Specific Criterion**									
Yes	319	290	91	221	69	98	31	215	67
No	524	195	37	248	47	4	1	71	14
Criterion Not Used									
	311	77	25	172	55	12	4	88	28

*Stanine 8 or more on at least 1 subtest.
**Stanine 9 on at least 1 subtest.

Criterion: Short Form Test of Academic Aptitude - Language, Nonlanguage, Total
Number of Students Screened Using Criterion: 501*
Number of Students in Global Pool: 1,920
Percentage of Global Pool Screened Using Criterion: 26

Attainment of Global Criterion**		Number and Percentage Passing Global Screening		Number and Percentage Requiring Professional Decision Making		Number and Percentage Passing Specific Screening		Number and Percentage Selected for Program	
	Number	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Yes	223	190	85	161	72	43	19	147	66
No	278	147	53	143	51	3	1	38	14
Attainment of Specific Criterion***									
Yes	118	100	85	79	67	39	33	81	69
No	383	237	62	225	59	7	2	104	27
Criterion Not Used									
	1,419	599	42	70	50	116	8	402	28

*457 of the 501 students screened had no total score recorded.
**Stanine 8 or more on at least 1 subtest or total.
***Stanine 9 on at least 1 subtest or total.

Criterion: Raven Matrices
Number of Students Screened Using Criterion: 2,019
Number of Students in Pool: 2,101*
Percentage of Global Pool Screened Using Criterion: 96

Attainment of Global Criterion**		Number and Percentage Passing Global Screening		Number and Percentage Requiring Professional Decision Making		Number and Percentage Passing Specific Screening		Number and Percentage Selected for Program	
	Number	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Yes	369	321	87	329	89	40	11	188	51
No	565	69	12	151	27	8	1	91	16
Attainment of Specific Criterion**									
Yes	1,075	738	69	907	84	168	16	571	53
No	944	194	21	192	20	2	0	77	8
Criterion Not Used									
	82	29	35	18	22	0	0	10	12

*Students in grades 2-3 screened in global screening; all others screened in specific screening.
**Criterion for global and specific screening is 90th percentile or more.

84

83

Criterion: Renzulli-Smith
Number of Students Screened Using Criterion: 50
Number of Students in Specific Pool: 226
Percentage of Specific Pool Screened Using Criterion: 22

Attainment of Specific Criterion*		Number and Percentage Passing Global Screening		Number and Percentage Requiring Professional Decision Making		Number and Percentage Passing Specific Screening		Number and Percentage Selected for Program	
	Number	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Yes	19	13	68	17	90	2	11	17	90
No	31	17	55	17	55	0	0	17	55
Criterion Not Used									
	176	2	1	75	43	6	3	38	22

*Score of 45 or more.

Criterion: Renzulli-Hartman - Learning, Motivation, Creativity
Number of Students Screened Using Criterion: 1,240
Number of Students in Specific Pool: 1,592
Percentage of Specific Pool Screened Using Criterion: 78

Attainment of Specific Criterion*		Number and Percentage Passing Global Screening		Number and Percentage Requiring Professional Decision Making		Number and Percentage Passing Specific Screening		Number and Percentage Selected for Program	
	Number	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Yes	313	263	84	193	62	120	38	253	81
No	927	425	46	584	63	3	0	243	26
Criterion Not Used									
	352	165	47	147	42	41	12	71	20

*Two or more of the following scores:

24 or more on Learning or Motivation
25 or more on Creativity

Criterion: CIRCUS - Think It Through
Number of Students Screened Using Criterion: 86
Number of Students in Specific Pool: 226*
Percentage of Specific Pool Screened Using Criterion: 38

Attainment of Specific Criterion**		Number and Percentage Passing Global Screening		Number and Percentage Requiring Professional Decision Making		Number and Percentage Passing Specific Screening		Number and Percentage Selected for Program	
	Number	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Yes	22	3	14	22	100	0	0	10	46
No	64	29	45	25	39	0	0	7	11
Criterion Not Used									
	140	20	14	62	44	8	6	55	39

*Number of students specifically screened in Grades K and 1.
**Scores of 28 or more.

Criterion: CIRCUS: How Much and How Many
Number of Students Screened Using Criterion: 130
Number of Students in Specific Pool: 226*
Percentage of Specific Pool Screened Using Criterion: 58

Attainment of Specific Criterion**		Number and Percentage Passing Global Screening		Number and Percentage Requiring Professional Decision Making		Number and Percentage Passing Specific Screening		Number and Percentage Selected for Program	
	Number	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Yes	69	11	16	61	88	8	12	49	71
No	61	9	15	25	41	0	0	7	12
Criterion Not Used	96	12	13	23	24	0	0	16	17

*Number of students specifically screened in Grades K and 1.
**Scores of 27 or more for kindergarten; 54 or more for first grade.

APPENDIX B

Initial Screening in Earliest Grade Served: 1981-82 Rescreening Activities

APPENDIX B

INITIAL SCREENING IN EARLIEST GRADE SERVED: 1981-82 RESCREENING ACTIVITIES

THE POPULATION SCREENED AND SELECTED

Screening and Selection

Six of the thirteen schools reported initial screening activities for the 1981-82 school year (see Exhibit B-1). Students were initially screened in Kindergarten (2 schools), first grade (2 schools), and second grade (3 schools). Five of the six schools reported their global screening procedures. The data show that 83 percent of the incoming students were globally screened, 35 percent were included in specific screening, but only 8 percent were selected for programs. By school, 43 to 100 percent of the incoming grade were globally screened (see Exhibit B-2), 26 to 51 percent were included in specific screening, and 0 to 30 percent were selected for programs. School 5 included 164 students in global screening but selected no students from this group for gifted and talented programs.

EXHIBIT B-1

Initial Screening of Earliest Grade by Grade and School

School	K	1	2
1	X		
2			X
3			
4			
5		X	X
6			X
7	X		
8		X	
9			
10			
11			
12			
13			

EXHIBIT B-2

Global and Specific Screening and Selection for Programs in the Earliest Incoming Grade by School

School	Students Included in Global Screening		Students Included in Specific Screening		Students Selected for Programs	
	Number	Percentage of Incoming Grade	Number	Percentage of Incoming Grade	Number	Percentage of Incoming Grade
1	(a)		13	26	8	16
2	52	79	25	38	3	5
5	164	99	53	32	0	0
6	21	43	21	43	0	0
7	112	100(b)	31	36	12	14
8	34	51	34	51	20	30
Total	383(c)	83(c)	177	35	43	8

(a) Globally screened all students in Grades K-3, but no detailed figures were provided.
(b) More students screened than school enrollment due to high mobility rate.
(c) Does not include school 1.

Initial Screening and Selection by Race[1]

Exhibit B-3 presents the population of the six schools broken down by racial group. Exhibits B-4 through B-6 present the racial proportions by school who were included in global and specific screening and who were selected for programs. The data indicate that while proportionately more blacks and Hispanics were included in global screening than their percentages of the sample population would suggest, fewer blacks and Hispanics were included in specific screening or selected for programs. Among the six schools 12 percent of the population was black and 4 percent was Hispanic. In global screening, there were 17 percent black students and 6 percent Hispanics; in specific screening, there were 7 percent blacks and 3 percent Hispanics; and among those selected for programs were 5 percent blacks and 2 percent Hispanics.

1. No analyses were conducted by sex.

EXHIBIT B-3

Percentage of Students by Race and School
for the Initial Screening Sample Schools

School	Asian	Black	Hispanic	White
1	8%	11%	4%	77%
2	0(a)	6	1	93
5	4	13	1	82
6	6	10	7	77
7	9	34	12	45
8	7	10	6	77
Total	5	12	4	79

(a) Percentage less than half of 1 percent.

EXHIBIT B-4

Students in Incoming Grade Included in Global Screening by School and Race

School	Total Globally Screened	Percentage of Entering Grade	Asian		Black		Hispanic		White	
			Number Screened	% of Those Screened	Number Screened	% of Those Screened	Number Screened	% of Those Screened	Number Screened	% of Those Screened
1	(a)									
2	52	79	2	4	0	0	0	0	50	96
5	164	99	8	5	26	16	1	1	129	78
6	21	43	0	0	0	0	4	19	17	81
7	112	100(b)	7	6	38	34	16	14	50	45
8	34	51	1	3	2	6	1	3	30	88
Total	383(c)	83(c)	18	5	66	17	22	6	276	72

(a) Globally screened all students in grades K-3, but no detailed figures were provided.
(b) More students screened than school enrollment due to high mobility rate.
(c) Does not include school 1.

EXHIBIT B-5

Students in Incoming Grade Included in Specific Screening by School and Race

School	Total Included in Specific Screening	Percentage of Entering Grade	Asian		Black		Hispanic		White	
			Number Screened	% of Those Screened	Number Screened	% of Those Screened	Number Screened	% of Those Screened	Number Screened	% of Those Screened
1	13	26	2	15	0	0	0	0	11	85
2	25	38	1	4	0	0	0	0	24	96
5	53	32	3	6	3	6	1	2	46	87
6	21	43	0	0	0	0	4	19	17	81
7	31	36	0	0	8	26	0	0	23	74
8	34	51	1	3	2	6	1	3	30	88
Total	177	35	7	4	13	7	6	3	151	85

EXHIBIT B-6

Students in Incoming Grade Selected for Programs by School and Race

School	Total Selected	Percentage of Entering Grade	Asian		Black		Hispanic		White	
			Number Screened	% of Those Screened	Number Screened	% of Those Screened	Number Screened	% of Those Screened	Number Screened	% of Those Screened
1	8	16	2	25	0	0	0	0	6	25
2	3	5	0	0	0	0	0	0	3	100
5	0	0								
6	0	0								
7	12	14	0	0	0	0	0	0	12	100
8	20	30	1	5	2	10	1	5	16	80
Total	43	8	3	7	2	5	1	2	37	86

THE PROCESS

The Instruments/Procedures Used in Initial Screening

Exhibits B-7 and B-8 present the instruments used in the six schools for global and specific screening of the incoming classes. The Raven matrices was the instrument most widely used in both global and specific screening. Moreover, it was the only global instrument used in school 2. In global screening, half the schools also used parent nomination and staff nomination, while in specific screening half the schools used the Short Form Test of Academic Achievement, the Renzulli-Smith, the Renzulli-Hartman, and CIRCUS.

Half of the schools required parent permission prior to including students in specific screening, and two other schools used parent nomination as one of the global screening procedures. However, school 2 used neither parent permission or parent nomination.[2] There did not appear to be any students who were eligible to be included in specific screening whose parents denied permission.

Further inconsistencies were noted in the way the specific screening instruments were utilized. In school 2, the Renzulli-Hartman was administered only for those students who met the criterion on the Raven or the Short Form Test of Academic Achievement. In Grade 1 in school 5, the Renzulli-Smith was administered only for those students who met the criterion on the CIRCUS or who received staff nomination. Additionally, the Raven was administered only if the student met the criterion on the Renzulli-Smith. Inconsistent use of the instruments/procedures might result in the ruling out of students who could have the potential of being included in programs where professional decision making is used.

USE OF PROFESSIONAL DECISION MAKING

Only one of the six schools (school 7) indicated that students had been included in programs based on a committee decision. Three white students who had attained one specific criterion were selected for program participation. In school 2, there were five students for whom the selection decision was questionable at the time of data collection. All five students had attained two specific criteria, and presumably committee decisions would be made for these students. Of the five students, there were four whites and one Asian.

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2. The use of parent permission is not required if the entire grade is screened. However, 79 percent of the entering grade in school 2 was globally screened.

EXHIBIT B-7

Instruments/Procedures Used in Global Screening of Incoming Classes by School and Grade

School	Parent Nomination	Staff Nomination	Nomination by Others	Raven Matrices	SFTAA[b]	CIRCUS	Stanford Achievement Test	Parent Permission[c]
1								X
2				2				
5	1,2[a]	1,2	2	2	2	1		
6				2			2	X
7	K	K		K				X
8	1	1						

(a) Numbers in cells are grade levels in which instrument/procedure was used.
(b) SFTAA=Short Form Test of Academic Achievement
(c) X=Parent permission required before student could be included in specific screening.

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EXHIBIT B-8

Instruments/Procedures Used in Specific Screening of Incoming Classes by School and Grade

School	Kaven Matrices	SFTAA[b]	Renzulli-Smith	Renzulli-Hartman	CIRCUS	SESAT[c]	Other[d]
1	K[a]		K		K	K	K
2	2	2		2			
5	1,2	2	1	2			
6	2	2		2			
7	K				K		
8	1		1		1		

(a) Numbers in cells are grade levels in which instrument/procedures was used.
(b) SFTAA=Short Form Test of Academic Achievement.
(c) SESAT=Stanford Early School Achievement Test.
(d) Other=Kough/DeHaan and Boehm.

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